

REMARKS

Consideration of all the claims now in the application (i.e., claims 104-119) is respectfully requested in view of the foregoing new claims and the following remarks.

Initially Applicants would like to thank the Examiner and his supervisor, Eduardo Robert, for the courtesy extended during the interview of April 9, 2008. During that interview the structural differences between the prior art Kaplan reference and the present invention were discussed. In addition, short video recordings of the vapor deposition process and the subsequent application of particles to the hollow webs formed by the vapor deposition process were viewed. Also discussed were photographs of the structure representing the Kaplan reference and the structure formed by the particle application of the present invention as shown in FIG. 13 of the present application. These photographs clearly show the structural differences between the two structures. Applicants have attached two photographs of this comparison to the Declaration of Mahesh Mohanty included with the present response. Mr. Mohanty was present at the interview. As discussed, these photographs clearly show the now claimed porous beaded structure surrounding the hollow webs.

In order to simplify the claims and highlight the differences between the present invention and the Kaplan reference Applicants have canceled all of the previous claims in the application and substituted new claims 104-119 which more clearly distinguish over the Kaplan reference. Specifically, the claims require that a metal foam network having an open cell structure defined by webs having a metal skin surrounded by an empty core. Furthermore, the claims require at least some of the metal skin to be covered with a porous layer of biocompatible metal particles bonded to the metal skin and other particles. As suggested by the Examiner, Applicants have

deleted the reference to a "hollow" web though Applicants believe that the current term "empty core" has the same meaning. As discussed during the interview, Kaplan has a core of carbon.

As suggested by the Examiner's supervisor, Applicants have claimed that the particle covered webs define the required pore size of 100 to 1000 microns for tissue ingrowth. The Applicants have also claimed that the porous layer of metal particles include portions having a diameter of 20 to 100 microns. This is shown in the 150 power side by side comparison of the Kaplan and Wang et al. structures. Even after bonding by, for example, by sintering, at least certain particles have portions exhibiting a diameter of 20 to 100 microns. Other parts of various particles are bonded via neck portions with adjacent particles.

As shown in the photographs, the claimed structure is different and therefore not anticipated by the Kaplan reference. None of the prior art cited by the Examiner teaches or suggests an open cell structure in which relatively weak empty webs are strengthened by a porous layer of particles bonded to the webs and to other particles. Such a structure unexpectedly provides a high strength porous structure with a dual porosity. The porosity of the layer of bonded metal particles being especially advantageous for the application of bone morphogenic proteins and other osteoinductive or osteoconductive coatings. Attached find a Declaration by Mahesh Mohanty, who was present at the interview, stating that the photographs of the present invention at 50 and 150 powers are enlargements of the originally filed FIG. 13 coating photograph which was at 29 power. This Declaration also states that the average roughness (Ra) of the claimed structure is greater than that of the structure shown in Kaplan. It can be seen that the structure shown in FIG. 3 of Kaplan has a relatively smooth outer surface when compared to the surface shown in FIG. 13 of the present invention and the

enlargement thereof. Thus Applicants submit that the new claimed structure clearly distinguishes over the structure shown in FIG. 3 of Kaplan.


As it is believed that all of the rejections set forth in the Official Action have been fully met, favorable reconsideration and allowance are earnestly solicited.

If, however, for any reason the Examiner does not believe that such action can be taken at this time, it is respectfully requested that he telephone Applicants' attorney at (908) 654-5000 in order to overcome any additional objections which he might have.

If there are any additional charges in connection with this requested amendment, the Examiner is authorized to charge Deposit Account No. 12-1095 therefor.

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Respectfully submitted,

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